

*Diagram of Proposed Street Network*

## 2.3 Infrastructure

- Make key infrastructure investments to bring the neighborhood up to City standards and encourage new investment.

An essential ingredient to a successful neighborhood is the quality of its infrastructure. In this case, the Haynie-Sirrine Neighborhood has a number of infrastructure needs to manage the existing population and a number of capital improvements to manage and encourage growth and redevelopment.

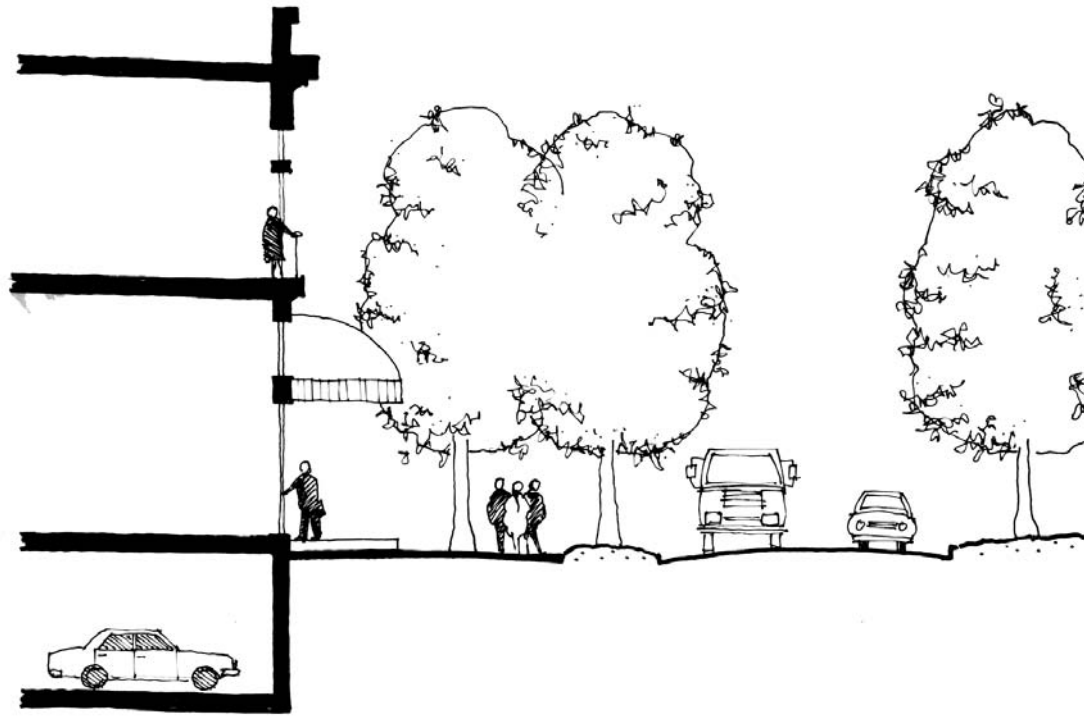
The Master Plan proposes infrastructure investments totalling approximately \$10 million (see Table 6) including improvements to Church Street, 2 parking structures, street extensions and connections, basic street improvements, and stream restoration. Of these improvements, approximately \$500,000 should be spent regardless of any redevelopment to bring the basic infrastructure up to City standards.

As is shown further, these investments have the potential to leverage nearly \$90 million in development projects that are viable under general market conditions in the neighborhood over the next twenty years.

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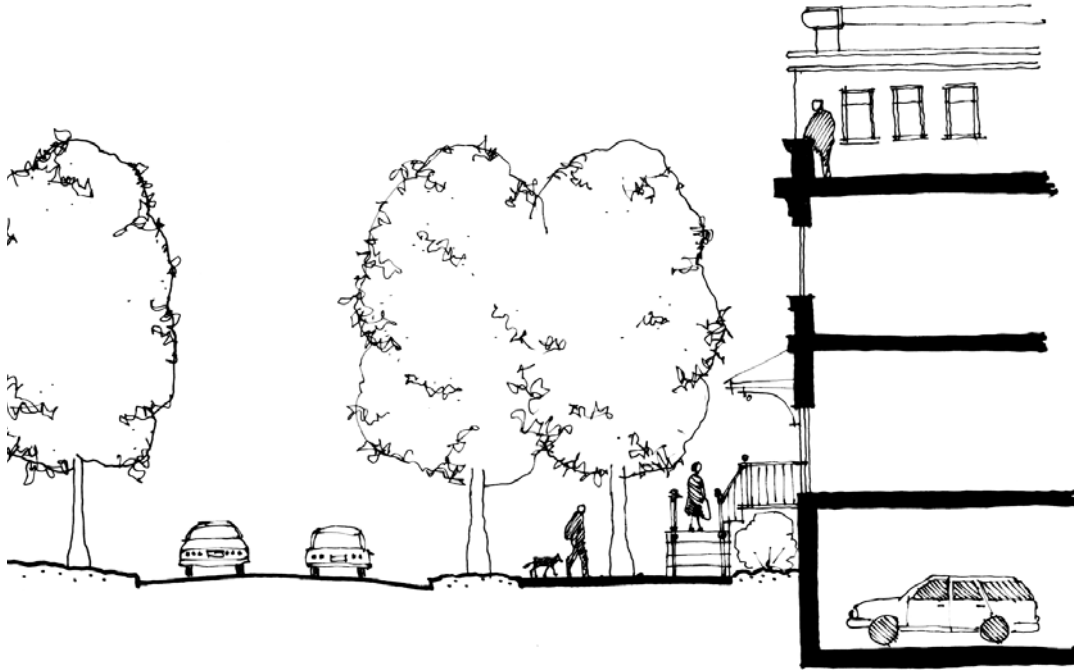
### 2.3.1 Church Street Boulevard

#### Existing Conditions:

At the very core of this Plan is the improvement of Church Street. When the road was completed in the 1950s, it was heralded by highway engineers as a “Superhighway,” ushering in the future of the automobile, and opposed by residents as “eating like a cancer into the surrounding residential areas.” What remains of Haynie-Sirrinc is a fragmented series of blocks with a dangerous and divisive barrier to access from one side to the other.

To accomplish this regeneration, Church Street must be transformed from a barrier into a seam. As a seam Church Street can then reconnect both sides of the neighborhood and reinvigorate the area with pedestrian activity. The study area from Augusta Road to University Ridge is the only segment that maintains a six-lane section with through movement. To the south, Mills Avenue and Augusta Road approach Church Street with four lane sections. The receiving lanes on the north side of University Ridge drop to four lanes on the elevated section north of the Reedy River crossing.

There is an extensive network of overhead wiring in the corridor, though apparently none of it is a main



*Proposed Church Street Boulevard section*

transmission line. The major transmission lines are located in the Augusta Road corridor.

#### **Infrastructure Improvements:**

Improvements to Church Street should include:

- A planted median in the center two lanes with median access and protected turn lanes at key locations;
- Improvement to the pedestrian environment with wide sidewalks separated from the curb by a generous planting strip and ordered street tree plantings;
- Lighting in the median for the automobiles and along sidewalks for pedestrians;
- Buried and relocated overhead wiring within the vicinity of the Neighborhood Center. The wiring in the remainder of the corridor should first be consolidated to one side and placed on decorative poles in an orderly manner, or if finances allow, buried underground in duct banks and conduits. All new lateral utility services should be underground.

Recognizing the importance of Church Street to the urban fabric of the study area, the design team requested a capacity analysis for the study corridor between Augusta Street and University Ridge. Note

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that this preliminary evaluation is not a substitute for a comprehensive traffic operations study of the subject corridor.

Preliminary analysis implies the feasibility of reducing the Church Street corridor from 6-lanes to a 4-lane divided section, while maintaining Church Street as a radial arterial to accommodate the ingress and egress of peak hour commuter traffic. The proposed modification of Church Street is a proactive reparation consistent with current federal environmental justice policies that protect neighborhoods, particularly minority neighborhoods, against intrusions by larger traffic projects.

Most importantly, the proposed Church Street changes are necessary to promote and retain the implementation of the Neighborhood Master Plan which will have other benefits: a mix of land uses, walkable urban environment, and increased residential density within close proximity to downtown Greenville. These factors, when combined, support other transportation initiatives through reduced vehicular trips, and the enhancement of alternate modes including pedestrians, bicycles, and transit opportunities.

Given the vast amount of right-of-way and excess capacity, all proposed modifications to the Church Street corridor should be accomplished within the existing transportation corridor. In fact, the typical section shown on pp. 34-35 could be implemented within the existing curb line, offering a significant cost savings. As shown in Table 1, the estimated costs are approximately \$3 million.

The reduction in through-lanes, lane widths, and the addition of street trees, lighting, and buildings located close to the street, will effectively tame the roadway, increasing the comfort of all modes within the corridor without severely effecting operations.

Finally, this public investment of \$3 million has the potential to directly leverage \$40 million in private development (See Table 2 & Table 3)

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*Note: A copy of the complete Transportation Supplement is included in Appendix A.*

**Table 1. Cost Estimate for Church Street Improvements**

Item	Cost	Quantity	Total
Mobilization	Lump Sum	LS	\$150,000
Surveying	Lump Sum	LS	\$100,000
Clearing and Grubbing	\$2,100	acre	\$0
Undercut Excavation	\$4	cu ft	\$0
Fill Material	\$6	cu yd	\$0
Milling of Pvt	\$1	cu ft	275,000
Proof Rolling	\$250	hr	40
Grading	Lump Sum	LS	
Fine Grading	Lump Sum	LS	\$250,000
Concrete Surface Course	\$100	cu yd	0
Aggregate Base Course	\$13	ton	\$0
Asphalt Curing Seal	\$0.11	gal	5,700
Asphalt/Concrete Intr. Course (H)	\$32	ton	\$0
Asphalt/Concrete Surface Course (1-2)	\$42	ton	5000
Concrete Pipe Removal	\$12	ft	1,200
2' Concrete Pipe	\$10	ft	\$0
2' Concrete Y,T,L's	\$20	ea	\$0
Masonry Drainage Structure	\$2,500	ea	\$0
Frames, Grates, Hoods	\$450	ea	\$0
Concrete Pad Subdm outlet	\$200	ea	\$0
Concrete Junction Box	\$2,500	ea	\$0
Rip Rap Class B	\$30	ton	1,000
Filter Fabric	\$3	s.y.	100
Curb and Gutter	\$15	ft	7,000
6" Monolithic Island	\$35	s.y.	800
Guardrail	\$12	ft	\$0
Signage		LS	\$50,000
Thermoplastic Pvmnt Markings	\$0.60	ft	15,000
Removal of Existing 4" Pvmnt Marking	\$0.30	ft	5,000
Permanent Raised Pvmnt Markers	\$6.50	ft	5,800
Thermoplastic Pvmnt Symbols	\$50	ea	50
Thermoplastic Pvmnt Character	\$25	ea	50
Guardrail Delineator, Perm, Crystal	\$6	ea	\$0
Guardrail End Treatment	\$600	ea	\$0
Temporary Silt Fence	\$2.50	ft	7,000
Erosion Control Stone	\$40	ton	\$0
Stilling Basin	\$12	cu ft	\$0
Seeding and Mulching	\$1,000	acre	\$0
Repair Seeding	\$6	lb	\$0
Repair Fertilizer	\$800	ton	\$0
Water	\$5	gal	50,000
Trenching (Un-Paved)	\$6	ft	5,000
Trenching (Paved)	\$25	ft	1000
Right-of-Way Markers	\$100	ea	\$0
Sidewalk	\$35	s.y.	2,500
Handicapped Ramps	\$1,000	ea	60
Signalized Intersection (Mast Arms)	\$100,000	ea	3
Tree Plantings	\$300	ea	300
Street Lighting (4 units per 75 LF)	\$10,000	ea	40
SUBTOTAL			\$2,282,527
Engineering Cost			10%
Contingency			20%
TOTAL:			\$2,967,285

*Note: This is not a certified engineer's estimate and is used solely for budget purposes using a schematic design. More accurate pricing should be completed following preliminary engineering and design.*

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### 2.3.2 University Ridge Boulevard

#### **Existing Conditions:**

University Ridge, named for its frontage along the former Furman University site (presently County Square) currently terminates at Augusta Road to the west and Cleveland Street to the east. The four-lane section has minimal pedestrian amenities. The County is currently studying the feasibility of connecting this corridor to Vardry Street to improve regional east-west movements.

Because of the capacity requirements at nearby Sbirrine Stadium, some overflow parking occurs at County Square on Friday evenings for the Greenville High School football games.

#### **Infrastructure Improvements:**

Like Church Street, the Master Plan suggests a number of improvements to the current cross-section, primarily to the pedestrian realm but also enhances the overall streetscape with street trees and a planted median.

The current laneage is proposed to remain in place with most improvements occurring on the sides within the right-of-way.



*Proposed University Ridge section*

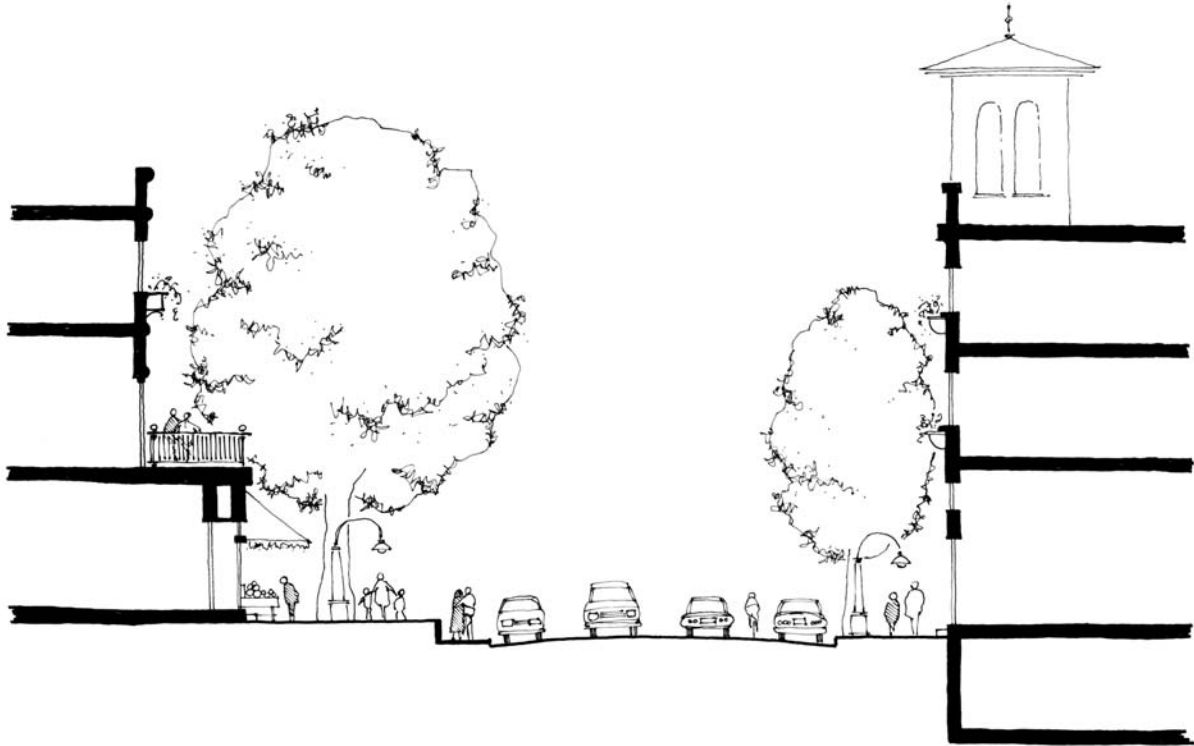
Proposed improvements include:

- A major pedestrian pathway with sidewalks 8-12 feet in width on the north side of the street, providing a promenade for students and other attendees of events at Sistine Stadium. This condition should extend across Church Street and terminate in front of Sistine Stadium.
- Crosswalks at Church Street and Cleveland Street differentiated using pavement markings at a minimum, but preferably with changes in texture or color. Given the volume of truck travel through the intersection at Church Street brick or concrete pavers should not be used, as they are typically not durable enough for such traffic.
- Decorative lighting with banner arms to provide a direct visual connection to the High School, creating a thematic corridor program that would directly tie the Stadium to Greenville High School and to other events in the area.
- Where existing conditions have parking lots adjacent to the right-of-way, a second row of trees planted between the sidewalk and the parking lots along with shrubbery to screen the parked cars from the pedestrian. Trees should be staggered on both sides of the sidewalk to create an alley.

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*Proposed Haynie Street section preserving the large oaks near the Church Street intersection*

### 2.3.3 Haynie-Pearl Connection

#### Existing Conditions:

Presently, Haynie Street and Pearl Avenue serve as neighborhood collectors terminating to the west at Augusta Street and to the east at the Cleveland Street/Jones Avenue intersection. Sidewalks are present along at least one side of both streets, though they are adjacent to the curb. Lighting is poorly located and is generally placed at the intersections only. Any canopy trees in this corridor are on private property.

At their intersection with Church Street, the lack of any substantial natural gaps in the traffic flow and the excessive average automobile speed preclude safe travel from one side to the other, either on foot or in a car. The team observed a number of cars approaching the intersection along Pearl Avenue and turning right onto Church Street, then making a U-turn at the next median opening with a subsequent turn onto Haynie Street in order to maximize their perceived safety.

#### Infrastructure Improvements:

Because of the logical placement of a new Neighborhood Center at the Haynie/Pearl/Church intersection, the role of this east-west movement is



increased.

- Modify Haynie Street to align with Dunbar Street, thereby creating a consistent neighborhood-to-neighborhood connection, giving local traffic an alternative to the University Ridge corridor.
- Redesign the cross-section to permit parallel parking along one side of the street throughout the corridor. In the Neighborhood Center, parking should be provided on both sides of the street.
- Place sidewalks on both sides of the street separated from the curb with a planting strip and canopy trees.
- Lighting should be decorative and pedestrian-scaled.
- Place existing aerial utilities underground when financially feasible. Otherwise, such overhead wiring should be placed on decorative poles and consolidated on one side of the street. All new services should be placed underground.

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